Driving the vehicle

The following procedures should be observed to ensure safe driving.

Starting the engine (RX350)

→P. 205

Starting the hybrid system (RX450h)

→P. 211

Driving

STEP 1 With the brake pedal depressed, shift the shift lever to D. (→P. 220, 227, 236)

STEP 2 Release the parking brake. (→P. 245)

STEP 3 Gradually release the brake pedal and gently depress the accelerator pedal to accelerate the vehicle.

Stopping

STEP 1 With the shift lever in D, depress the brake pedal.

STEP 2 If necessary, set the parking brake.

RX350: If the vehicle is to be stopped for an extended period of time, shift the shift lever to P or N. (→P. 220, 227)

RX450h: If the vehicle is to be stopped for an extended period of time, shift the shift lever to P. (→P. 236)

Parking the vehicle

STEP 1 With the shift lever in D, depress the brake pedal.

STEP 2 Set the parking brake. (→P. 245)

STEP 3 Shift the shift lever to P. (→P. 220, 227, 236)

If parking on a hill, block the wheels as needed.

STEP 4 RX350: Press the "ENGINE START STOP" switch to stop the engine.

RX450h: Press the "POWER" switch to stop the hybrid system.

STEP 5 Lock the door, making sure that you have the electronic key on your person.

Starting off on a steep uphill

STEP 1 Make sure that the parking brake is set and shift the shift lever to D.

STEP 2 Gently depress the accelerator pedal.

STEP 3 Release the parking brake.

Driving in the rain

- Drive carefully when it is raining, because visibility will be reduced, the windows may become fogged-up, and the road will be slippery.
- Drive carefully when it starts to rain, because the road surface will be especially slippery.
- Refrain from high speeds when driving on an expressway in the rain, because there may be a layer of water between the tires and the road surface, preventing the steering and brakes from operating properly.

Engine speed while driving (RX350)

In the following conditions, the engine speed may become high while driving. This is due to automatic up-shifting control or down-shifting implementation to meet driving conditions. It does not indicate sudden acceleration.

- The vehicle is judged to be driving uphill or downhill
- When the accelerator pedal is released

Breaking in your new Lexus

To extend the life of the vehicle, observing the following precautions is recommended:

- For the first 200 miles (300 km):
  Avoid sudden stops.
- For the first 500 miles (800 km):
  Do not tow a trailer.
- For the first 1000 miles (1600 km):
  - Do not drive at extremely high speeds.
  - Avoid sudden acceleration.
  - Do not drive continuously in low gears.
  - Do not drive at a constant speed for extended periods.

Drum-in-disc type parking brake system

Your vehicle has a drum-in-disc type parking brake system. This type of brake system needs bedding-down of the brake shoes periodically or whenever the parking brake shoes and/or drum are replaced. Have your Lexus dealer perform the bedding down operation.

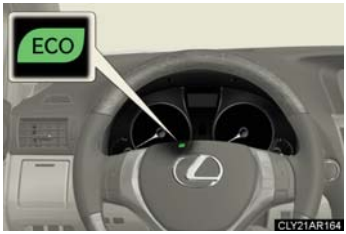
Operating your vehicle in a foreign country

Comply with the relevant vehicle registration laws and confirm the availability of the correct fuel. (→P. 947)

For efficient use (RX450h)

- Shift the shift lever to D when driving.
  In the N position, the gasoline engine operates but electricity cannot be generated. The hybrid battery (traction battery) will discharge, requiring unnecessary engine power to recharge.
- Drive your vehicle smoothly.
  Avoid abrupt acceleration and deceleration. Gradual acceleration and deceleration will make more effective use of the electric motor (traction motor) without having to use gasoline engine power.
- Avoid repeated acceleration.
  Repeated acceleration consumes hybrid battery (traction battery) power, resulting in poor acceleration. Battery power can be restored by driving with the accelerator pedal slightly released.
- Shift the shift lever to P when parking.
  In the N position, the hybrid battery (traction battery) does not recharge.
  Leaving the shift lever in the N position for an extended period of time may discharge the hybrid battery. The vehicle cannot run if the hybrid battery is discharged.

Eco-friendly driving (RX350)



During Eco-friendly acceleration (Eco driving), Eco Driving Indicator Light will turn on. When the acceleration exceeds Zone of Eco driving, and when the vehicle is stopped, the light turns off.

Eco Driving Indicator Light will not operate in the following conditions:

- The shift lever is in anything other than D.
- The paddle shift switch is operated. (if equipped)
- The driving mode is set to snow mode. (→P. 222, 229)
- The vehicle speed is approximately 80 mph (130 km/h) or higher.

Eco-friendly driving (RX450h)

→P. 250

Customization (RX350)

Setting of Eco Driving Indicator Light can be changed.
(Customizable features →P. 980)

CAUTION

When starting the vehicle

▶ RX350

Always keep your foot on the brake pedal while stopped with the engine running. This prevents the vehicle from creeping.

▶ RX450h

Always keep your foot on the brake pedal while stopped with the hybrid system operating. This prevents the vehicle from creeping.

⚠ CAUTION

■ When driving the vehicle

- Do not drive if you are unfamiliar with the location of the brake and accelerator pedals to avoid depressing the wrong pedal.
  - Accidentally depressing the accelerator pedal instead of the brake pedal will result in sudden acceleration that may lead to an accident that could result in death or serious injury.
  - When backing up, you may twist your body around, leading to a difficulty in operating the pedals. Make sure to operate the pedals properly.
  - Make sure to keep a correct driving posture even when moving the vehicle only slightly. This allows you to depress the brake and accelerator pedals properly.
  - Depress the brake pedal using your right foot. Depressing the brake pedal using your left foot may delay response in an emergency, resulting in an accident.
- RX450h: When the hybrid vehicle is driven using the electric motor only, no engine noise is made. As such, pedestrians, people riding bicycles or other people and vehicles in the surrounding area may not realize that the vehicle is approaching. Even with the Vehicle Proximity Notification System active, people may not realize the vehicle is approaching when the surrounding area is noisy and so forth. Therefore, take extra care while driving.
- Do not drive the vehicle over or stop the vehicle near flammable materials.
  The exhaust system and exhaust gases can be extremely hot. These hot parts may cause a fire if there is any flammable material nearby.
- Do not let the vehicle roll backward while the shift lever is in a driving position, or roll forward while the shift lever is in R.
  RX350: Doing so may cause the engine to stall or lead to poor brake and steering performance, resulting in an accident or damage to the vehicle.
  RX450h: Doing so may result in an accident or damage to the vehicle.
- If the smell of exhaust is noticed inside the vehicle, open the windows and check that the back door is closed. Large amounts of exhaust in the vehicle can cause driver drowsiness and an accident, resulting in death or a serious health hazard. Have the vehicle inspected by your Lexus dealer immediately.
- Do not shift the shift lever to P while the vehicle is moving.
  Doing so can damage the transmission and may result in a loss of vehicle control.

⚠ CAUTION

- Do not shift the shift lever to R while the vehicle is moving forward.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- Do not shift the shift lever to D while the vehicle is moving backward.
  Doing so can damage the transmission and may result in a loss of vehicle control.
- RX350: Moving the shift lever to N while the vehicle is moving will disengage the engine from the transmission. Engine braking is not available when N is selected.
- RX450h: Moving the shift lever to N while the vehicle is moving will disengage the hybrid system. Engine braking is not available with the hybrid system disengaged.
- RX350: During normal driving, do not turn off the engine. Turning the engine off while driving will not cause loss of steering or braking control, but the power assist to these systems will be lost. This will make it more difficult to steer and brake, so you should pull over and stop the vehicle as soon as it is safe to do so.
  However, in the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P. 940
- RX450h: During normal driving, do not turn off the hybrid system. Turning the hybrid system off while driving will not cause loss of steering or braking control, but the power assist to these systems will be lost. This will make it more difficult to steer and brake, so you should pull over and stop the vehicle as soon as it is safe to do so.
  However, in the event of an emergency, such as if it becomes impossible to stop the vehicle in the normal way: →P. 940
- Use engine braking (downshift) to maintain a safe speed when driving down a steep hill.
  Using the brakes continuously may cause the brakes to overheat and lose effectiveness. (→P. 220, 227, 236)
- When stopped on an incline, use the brake pedal and parking brake to prevent the vehicle from rolling backward or forward, causing an accident.
- Do not adjust the position of the steering wheel, the seat, or the inside or outside rear view mirrors while driving.
  Doing so may result in a loss of vehicle control that can cause accidents, resulting in death or serious injury.
- Always check that all passengers' arms, heads or other parts of their body are not outside the vehicle, as this may result in death or serious injury.

⚠ CAUTION

- Do not drive in excess of the speed limit. Even if the legal speed limit permits it, do not drive over 85 mph (140 km/h) unless your vehicle has high-speed capability tires. Driving over 85 mph (140 km/h) may result in tire failure, loss of control and possible injury. Be sure to consult a tire dealer to determine whether the tires on your vehicle are high-speed capability tires or not before driving at such speeds.

■ When driving on slippery road surfaces

- Sudden braking, acceleration and steering may cause tire slippage and reduce your ability to control the vehicle, resulting in an accident.
- Sudden acceleration, engine braking due to shift changing, or changes in engine speed could cause the vehicle to skid, resulting in an accident.
- After driving through a puddle, lightly depress the brake pedal to make sure that the brakes are functioning properly. Wet brake pads may prevent the brakes from functioning properly. If the brakes on only one side are wet and not functioning properly, steering control may be affected, resulting in an accident.

■ When shifting the shift lever

Be careful not to shift the shift lever with the accelerator pedal depressed.
This may lead to unexpected rapid acceleration of the vehicle that may cause an accident and result in death or serious injury.

■ If you hear a squealing or scraping noise (brake pad wear limit indicators)

Have your Lexus dealer check and replace the brake pads as soon as possible.
Rotor damage can result if the pads are not replaced when needed.

It is dangerous to drive the vehicle when the wear limits of the brake pads and/or those of the brake discs are exceeded.

⚠ CAUTION

■ When the vehicle is stopped

- RX350: Do not race the engine.
  If the vehicle is in any gear other than P or N, the vehicle may accelerate suddenly and unexpectedly, causing an accident.
- RX450h: Do not depress the accelerator pedal unnecessarily.
  If the vehicle is in any gear other than P or N, the vehicle may accelerate suddenly and unexpectedly, causing an accident.
- RX350: Do not leave the vehicle with the engine running for a long time.
  If such a situation cannot be avoided, park the vehicle in an open space and check that exhaust fumes do not enter the vehicle interior.
- RX450h: Do not leave the vehicle with the hybrid system on for a long time.
  If such a situation cannot be avoided, park the vehicle in an open space and check that exhaust fumes do not enter the vehicle interior.
- RX350: In order to prevent accidents due to the vehicle rolling away, always keep depressing the brake pedal while the engine is running, and apply the parking brake as necessary.
- RX450h: In order to prevent accidents due to the vehicle rolling away, always keep depressing the brake pedal while the "READY" indicator is on. Apply the parking brake as necessary.
- If the vehicle is stopped on an incline, in order to prevent accidents caused by the vehicle rolling forward or backward, always depress the brake pedal and securely apply the parking brake as needed.
- Avoid revving or racing the engine.
  Running the engine at high speed while the vehicle is stopped may cause the exhaust system to overheat, which could result in a fire if combustible material is nearby.

⚠ CAUTION

When the vehicle is parked

- Do not leave glasses, cigarette lighters, spray cans, or soft drink cans in the vehicle when it is in the sun.
  Doing so may result in the following:
  - Gas may leak from a cigarette lighter or spray can, and may lead to a fire.
  - The temperature inside the vehicle may cause the plastic lenses and plastic material of glasses to deform or crack.
  - Soft drink cans may fracture, causing the contents to spray over the interior of the vehicle, and may also cause a short circuit in the vehicle's electrical components.
- Do not leave cigarette lighters in the vehicle. If a cigarette lighter is in a place such as the glove box or on the floor, it may be lit accidentally when luggage is loaded or the seat is adjusted, causing a fire.
- Do not attach adhesive discs to the windshield or windows. Do not place containers such as air fresheners on the instrument panel or dashboard. Adhesive discs or containers may act as lenses, causing a fire in the vehicle.
- Do not leave a door or window open if the curved glass is coated with a metallized film such as a silver-colored one. Reflected sunlight may cause the glass to act as a lens, causing a fire.
- RX350: Always apply the parking brake, shift the shift lever to P, stop the engine and lock the vehicle.
  Do not leave the vehicle unattended while the engine is running.
- RX450h: Always apply the parking brake, shift the shift lever to P, stop the hybrid system and lock the vehicle.
  Do not leave the vehicle unattended while the hybrid system is operating.
- RX350: Do not touch the exhaust pipes while the engine is running or immediately after turning the engine off.
  Doing so may cause burns.
- RX450h: Do not touch the exhaust pipes while the hybrid system is operating or immediately after turning the hybrid system off.
  Doing so may cause burns.

⚠ CAUTION

- RX350: Do not leave the engine running in an area with snow build-up, or where it is snowing. If snowbanks build up around the vehicle while the engine is running, exhaust gases may collect and enter the vehicle. This may lead to death or a serious health hazard.
- RX450h: Do not leave the hybrid system operating in an area with snow build-up, or where it is snowing. If snowbanks build up around the vehicle while the hybrid system is operating, exhaust gases may collect and enter the vehicle. This may lead to death or a serious health hazard.

Exhaust gases

Exhaust gases include harmful carbon monoxide (CO) that is colorless and odorless. Inhaling exhaust gases may lead to death or a serious health hazard.

- If the vehicle is in a poorly ventilated area, stop the engine (RX350) or hybrid system (RX450h). In a closed area, such as a garage, exhaust gases may collect and enter the vehicle. This may lead to death or a serious health hazard.
- The exhaust system should be checked occasionally. If there is a hole or crack caused by corrosion, damage to a joint or abnormal exhaust noise, be sure to have the vehicle inspected and repaired by your Lexus dealer. Failure to do so may allow exhaust gases to enter the vehicle, resulting in death or a serious health hazard.

When taking a nap in the vehicle

▶ RX350

Always turn the engine off. Otherwise, if you accidentally move the shift lever or depress the accelerator pedal, this could cause an accident or fire due to engine overheating. Additionally, if the vehicle is parked in a poorly ventilated area, exhaust gases may collect and enter the vehicle, leading to death or a serious health hazard.

▶ RX450h

Always turn the hybrid system off. Otherwise, if you accidentally move the shift lever or depress the accelerator pedal, this could cause an accident or fire due to hybrid system overheating. Additionally, if the vehicle is parked in a poorly ventilated area, exhaust gases may collect and enter the vehicle, leading to death or a serious health hazard.

⚠ CAUTION

■ When braking the vehicle

- When the brakes are wet, drive more cautiously.
  Braking distance increases when the brakes are wet, and this may cause one side of the vehicle to brake differently than the other side. Also, the parking brake may not securely hold the vehicle.
- If the power brake assist function does not operate, do not follow other vehicles closely and avoid hills or sharp turns that require braking.
  In this case, braking is still possible, but the brake pedal should be depressed more firmly than usual. Also, the braking distance will increase.
- RX350: Do not pump the brake pedal if the engine stalls.
  Each push on the brake pedal uses up the reserve for the power-assisted brakes.
- RX350: The brake system consists of 2 individual hydraulic systems; if one of the systems fails, the other will still operate. In this case, the brake pedal should be depressed more firmly than usual and the braking distance will increase.
  If this happens, do not drive the vehicle. Have your brakes fixed immediately.
- RX450h: The brake system consists of 3 individual hydraulic systems; if one of the systems fails, the others will still operate. In this case, the brake pedal should be depressed more firmly than usual and the braking distance will increase. If this happens, do not continue to drive the vehicle. If the brake system warning light (red indicator) comes on together with the buzzer sound while driving, immediately stop the vehicle in a safe place and contact your Lexus dealer.

■ If the vehicle becomes stuck

Do not spin the wheels excessively when any of the tires is up in the air, or the vehicle is stuck in sand, mud, etc. This may damage the driveline components or propel the vehicle forward or backward, causing an accident.

NOTICE

■ When driving the vehicle

- Do not depress the accelerator and brake pedals at the same time during driving, as this may restrain driving torque.
- Do not use the accelerator pedal or depress the accelerator and brake pedals at the same time to hold the vehicle on a hill.

■ When parking the vehicle

Always shift the shift lever to P. Failure to do so may cause the vehicle to move or the vehicle may accelerate suddenly if the accelerator pedal is accidentally depressed.

■ Avoiding damage to vehicle parts

- Do not turn the steering wheel fully in either direction and hold it there for an extended period of time.
  Doing so may damage the power steering motor.
- When driving over bumps in the road, drive as slowly as possible to avoid damaging the wheels, underside of the vehicle, etc.

■ If you get a flat tire while driving

A flat or damaged tire may cause the following situations. Hold the steering wheel firmly and gradually depress the brake pedal to slow down the vehicle.

- It may be difficult to control your vehicle.
- The vehicle will make abnormal sounds.
- The vehicle will behave abnormally.

Information on what to do in case of a flat tire (→P. 897)

NOTICE

■ **When encountering flooded roads**

Do not drive on a road that has flooded after heavy rain etc. Doing so may cause the following serious damage to the vehicle:

- Engine stalling
- Short in electrical components
- Engine damage caused by water immersion

In the event that you drive on a flooded road and the vehicle is flooded, be sure to have your Lexus dealer check the following:

- Brake function
- RX350: Changes in quantity and quality of oil and fluid used for the engine, transaxle, transfer (AWD models), differential, etc.
- RX450h: Changes in quantity and quality of oil and fluid used for the engine, hybrid transmission, etc., and, for AWD models, the rear electric motor (traction motor).
- Lubricant condition for the propeller shaft (RX350 AWD models), bearings and suspension joints (where possible), and the function of all joints, bearings, etc.

Engine (ignition) switch (RX350)

Performing the following operations when carrying the electronic key on your person starts the engine or changes "ENGINE START STOP" switch modes.

Starting the engine

STEP 1 Check that the parking brake is set.

STEP 2 Check that the shift lever is set in P.

STEP 3 Firmly depress the brake pedal.

The "ENGINE START STOP" switch indicator will turn green. If the indicator does not turn green, the engine cannot be started.

STEP 4

Press the "ENGINE START STOP" switch.

The engine will crank until it starts or for up to 30 seconds, whichever is less.

Continue depressing the brake pedal until the engine is completely started.

The engine can be started from any "ENGINE START STOP" switch mode.

Stopping the engine

STEP 1 Stop the vehicle.

STEP 2 Shift the shift lever to P.

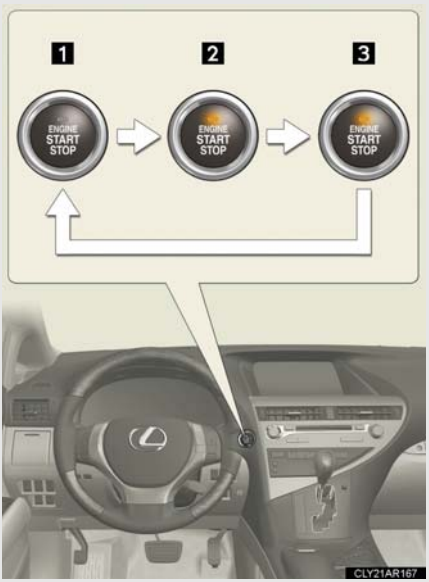
STEP 3 Set the parking brake. (→P. 245)

STEP 4 Press the "ENGINE START STOP" switch.

STEP 5 Release the brake pedal and check that the indicator on the "ENGINE START STOP" switch is off.

Changing "ENGINE START STOP" switch modes

Modes can be changed by pressing the "ENGINE START STOP" switch with the brake pedal released. (The mode changes each time the switch is pressed.)



1 Off*

The emergency flashers can be used.

2 ACCESSORY mode

Some electrical components such as the audio system can be used.

The "ENGINE START STOP" switch indicator turns amber.

3 IGNITION ON mode

All electrical components can be used.

The "ENGINE START STOP" switch indicator turns amber.

*: If the shift lever is in a position other than P when turning off the engine, the "ENGINE START STOP" switch will be turned to ACCESSORY mode, not to off.

When stopping the engine with the shift lever in a position other than P

If the engine is stopped with the shift lever in a position other than P, the "ENGINE START STOP" switch will not be turned off but instead be turned to ACCESSORY mode. Perform the following procedure to turn the switch off:

STEP 1 Check that the parking brake is set.

STEP 2 Shift the shift lever to P.

STEP 3 Check that the indicator on the "ENGINE START STOP" switch is illuminated in amber and then press the "ENGINE START STOP" switch once.

STEP 4 Check that the indicator on the "ENGINE START STOP" switch is off.

Auto power off function

When the shift lever is in P, if the vehicle is left in ACCESSORY or IGNITION ON mode with the engine not running for more than 20 minutes (ACCESSORY mode) or one hour (IGNITION ON mode), the "ENGINE START STOP" switch will automatically turn off. However, this function cannot entirely prevent 12-volt battery discharge. Do not leave the vehicle with the "ENGINE START STOP" switch in ACCESSORY or IGNITION ON mode for long periods of time when the engine is not running.

Operation of the "ENGINE START STOP" switch

When operating the "ENGINE START STOP" switch, one short, firm press is enough. If the switch is pressed improperly, the engine may not start or the "ENGINE START STOP" switch mode may not change. It is not necessary to press and hold the switch.

Electronic key battery depletion

→P. 72

Conditions affecting operation

→P. 69

Note for the entry function

→P. 70

■ **If the engine does not start**

The engine immobilizer system may not have been deactivated. (→P. 145)
Contact your Lexus dealer.

■ **Steering lock**

After turning the "ENGINE START STOP" switch off and opening and closing the doors, the steering wheel will be locked due to the steering lock function. Operating the "ENGINE START STOP" switch again automatically cancels the steering lock.

■ **When the steering lock cannot be released**

The green indicator light on the "ENGINE START STOP" switch will flash and a message will be shown on the multi-information display. Press the "ENGINE START STOP" switch again while turning the steering wheel left and right.

■ **Steering lock motor overheating prevention**

To prevent the steering lock motor from overheating, the motor may be suspended if the engine is turned on and off repeatedly in a short period of time. In this case, refrain from operating the engine. After about 2 seconds, the steering lock motor will resume functioning.

■ **When the "ENGINE START STOP" switch indicator flashes in amber**

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

■ **If the electronic key battery is depleted**

→P. 792

⚠ CAUTION

■ When starting the engine

Always start the engine while sitting in the driver's seat. Do not depress the accelerator pedal while starting the engine under any circumstances.
Doing so may cause an accident resulting in death or serious injury.

■ Caution while driving

If the vehicle begins to slide due to engine failure or other circumstances, do not lock or open the doors until the vehicle reaches a safe and complete stop. Activation of the steering lock in this circumstance may lead to an accident, resulting in death or serious injury.

■ Stopping the engine in an emergency

If you want to stop the engine in an emergency while driving the vehicle, press and hold the "ENGINE START STOP" switch for more than 2 seconds, or press it briefly 3 times or more in succession. (→P. 940)
However, do not touch the "ENGINE START STOP" switch while driving except in an emergency. Turning the engine off while driving will not cause loss of steering or braking control, but the power assist to these systems will be lost. This will make it more difficult to steer and brake, so you should pull over and stop the vehicle as soon as it is safe to do so.

NOTICE

■ To prevent 12-volt battery discharge

- Do not leave the "ENGINE START STOP" switch in ACCESSORY or IGNITION ON mode for long periods of time without the engine running.
- If the indicator on the "ENGINE START STOP" switch is illuminated, the "ENGINE START STOP" switch is not off. When exiting the vehicle, always check that the "ENGINE START STOP" switch is off.
- Do not stop the engine when the shift lever is in a position other than P. If the engine is stopped in another shift lever position, the "ENGINE START STOP" switch will not be turned off but instead be turned to ACCESSORY mode. If the vehicle is left in ACCESSORY mode, 12-volt battery discharge may occur.

■ When starting the engine

- Do not race a cold engine.
- If the engine becomes difficult to start or stalls frequently, have your vehicle checked by your Lexus dealer immediately.

■ Symptoms indicating a malfunction with the "ENGINE START STOP" switch

If the "ENGINE START STOP" seems to be operating somewhat differently than usual, such as the switch sticking slightly, there may be a malfunction. Contact your Lexus dealer immediately.

Power (ignition) switch (RX450h)

Performing the following operations when carrying the electronic key on your person starts the hybrid system or changes "POWER" switch modes.

Starting the hybrid system

STEP 1 Check that the parking brake is set.

STEP 2 Check that the shift lever is set in P.

STEP 3 Firmly depress the brake pedal.

The "POWER" switch indicator will turn green. If the indicator does not turn green, the hybrid system cannot be started.

STEP 4

Press the "POWER" switch.

After a while, the "READY" indicator comes on with a beep sound.

The vehicle can move when the "READY" indicator is on even if the engine is stopped.

Continue depressing the brake pedal until the hybrid system is completely started.

The hybrid system can be started from any "POWER" switch mode.

STEP 5 Check that the "READY" indicator is on.

The vehicle will not move when the "READY" indicator is off.

Stopping the hybrid system

STEP 1 Stop the vehicle.

STEP 2 Shift the shift lever to P.

STEP 3 Set the parking brake. (→P. 245)

STEP 4 Press the "POWER" switch.

STEP 5 Release the brake pedal and check that the indicator on the "POWER" switch is off.

Changing "POWER" switch modes

Modes can be changed by pressing the "POWER" switch with the brake pedal released. (The mode changes each time the switch is pressed.)

1 Off*

The emergency flashers can be used.

2 ACCESSORY mode

Some electrical components such as the audio system can be used.

The "POWER" switch indicator turns amber.

3 ON mode

All electrical components can be used.

The "POWER" switch indicator turns amber.

*: If the shift lever is in a position other than P when turning off the hybrid system, the "POWER" switch will be turned to ACCESSORY mode, not to off.

When stopping the hybrid system with the shift lever in a position other than P

If the hybrid system is stopped with the shift lever in a position other than P, the "POWER" switch will not be turned off but instead be turned to ACCESSORY mode. Perform the following procedure to turn the switch off:

STEP 1 Check that the parking brake is set.

STEP 2 Shift the shift lever to P.

STEP 3 Check that the indicator on the "POWER" switch is illuminated in amber and then press the "POWER" switch once.

STEP 4 Check that the indicator on the "POWER" switch is off.

■ Auto power off function

When the shift lever is in P, if the vehicle is left in ACCESSORY or ON mode with the hybrid system not operating for more than 20 minutes (ACCESSORY mode) or one hour (ON mode), the "POWER" switch will automatically turn off. However, this function cannot entirely prevent 12-volt battery discharge. Do not leave the vehicle with the "POWER" switch in ACCESSORY or ON mode for long periods of time when the hybrid system is not operating.

■ Operation of the "POWER" switch

When operating the "POWER" switch, one short, firm press is enough. If the switch is pressed improperly, the hybrid system may not start or the "POWER" switch mode may not change. It is not necessary to press and hold the switch.

■ Sounds and vibrations specific to a hybrid vehicle

→P. 37

■ Electronic key battery depletion

→P. 72

■ When the ambient temperature is low, such as during winter driving conditions

It may take time until the "READY" indicator comes on.

■ Conditions affecting operation

→P. 69

■ **Note for the entry function**

→P. 70

■ **If the hybrid system does not start**

The immobilizer system may not have been deactivated. (→P. 147)
Contact your Lexus dealer.

■ **Steering lock**

After turning the "POWER" switch off and opening and closing the doors, the steering wheel will be locked due to the steering lock function. Operating the "POWER" switch again automatically cancels the steering lock.

■ **When the steering lock cannot be released**

The green indicator light on the "POWER" switch will flash and a message will be shown on the multi-information display. Press the "POWER" switch again while turning the steering wheel left and right.

■ **Steering lock motor overheating prevention**

To prevent the steering lock motor from overheating, the motor may be suspended if the hybrid system is turned on and off repeatedly in a short period of time. In this case, refrain from operating the hybrid system. After about 2 seconds, the steering lock motor will resume functioning.

■ **When the "POWER" switch indicator flashes in amber**

The system may be malfunctioning. Have the vehicle inspected by your Lexus dealer immediately.

■ **If the "READY" indicator does not come on**

If the "READY" indicator does not come on when you press the "POWER" switch with the shift lever in P and the brake pedal depressed, contact your Lexus dealer immediately.

■ **If the hybrid system is malfunctioning**

→P. 871

■ **If the electronic key battery is depleted**

→P. 792

⚠ CAUTION

■ **When starting the hybrid system**

Always start the hybrid system while sitting in the driver's seat. Do not depress the accelerator pedal while starting the hybrid system under any circumstances.
Doing so may cause an accident resulting in death or serious injury.

■ **Caution while driving**

If a hybrid system failure occurs while the vehicle is moving, do not lock or open the doors until the vehicle reaches a safe and complete stop. Activation of the steering lock in this circumstance may lead to an accident, resulting in death or serious injury.

■ **Stopping the hybrid system in an emergency**

If you want to stop the hybrid system in an emergency while driving the vehicle, press and hold the "POWER" switch for more than 2 seconds, or press it briefly 3 times or more in succession. (→P. 940)
However, do not touch the "POWER" switch while driving except in an emergency. Turning the hybrid system off while driving will not cause loss of steering or braking control, but the power assist to these systems will be lost. This will make it more difficult to steer and brake, so you should pull over and stop the vehicle as soon as it is safe to do so.

NOTICE

■ To prevent 12-volt battery discharge

- Do not leave the "POWER" switch in ACCESSORY or ON mode for long periods of time without the hybrid system on.
- If the indicator on the "POWER" switch is illuminated, the "POWER" switch is not off. When exiting the vehicle, always check that the "POWER" switch is off.
- Do not stop the hybrid system when the shift lever is in a position other than P. If the hybrid system is stopped in another shift lever position, the "POWER" switch will not be turned off but instead be turned to ACCESSORY mode. If the vehicle is left in ACCESSORY mode, 12-volt battery discharge may occur.

■ When starting the hybrid system

- Do not depress the accelerator pedal unnecessarily.
- If the hybrid system becomes difficult to start, have your vehicle checked by your Lexus dealer immediately.

■ Symptoms indicating a malfunction with the "POWER" switch

If the "POWER" switch seems to be operating somewhat differently than usual, such as the switch sticking slightly, there may be a malfunction. Contact your Lexus dealer immediately.

EV drive mode (RX450h)

In EV drive mode, the electric motor (traction motor), powered by the hybrid battery (traction battery), is used to drive the vehicle.

This mode allows you to drive in residential areas early in the morning and late at night, or in indoor parking lots etc. without concern for noises and exhaust gas emissions.
However, when the Vehicle Proximity Notification System is active, the vehicle may produce sound.

Turns EV drive mode on/off

When EV drive mode is turned on, the EV drive mode indicator will come on. Pressing the switch when in EV drive mode will return the vehicle to normal driving (using the gasoline engine and electric motor [traction motor]).

Switching to EV drive mode when the gasoline engine is cold

If the hybrid system is started while the gasoline engine is cold, the gasoline engine will start automatically after a short period of time in order to warm up. In this case, you will become unable to switch to EV drive mode.
After the hybrid system has started and the "READY" indicator has illuminated, press the EV drive mode switch before the gasoline engine starts to switch to EV drive mode.

■ **Situations in which EV drive mode cannot be turned on**

It may not be possible to turn EV drive mode on in the following situations. If it cannot be turned on, a buzzer will sound and a message will be shown on the multi-information display.

- The temperature of the hybrid system is high.
  The vehicle has been left in the sun, driven on a hill, driven at high speeds, etc.
- The temperature of the hybrid system is low.
  The vehicle has been left in extremely low temperatures for a long period of time etc.
- The gasoline engine is warming up.
- The hybrid battery (traction battery) is low.
- Vehicle speed is about 25 mph (40 km/h) or more.
- The accelerator pedal is depressed firmly or the vehicle is on a hill etc.
- The windshield defogger is in use.

■ **Automatic cancelation of EV drive mode**

When driving in EV drive mode, the gasoline engine may automatically restart in the following situations. When EV drive mode is canceled, a buzzer will sound and the EV drive mode indicator will flash and go off.

- The hybrid battery (traction battery) becomes low.
- Vehicle speed becomes more than about 25 mph (40 km/h).
  If engine coolant temperature is low, EV drive mode may be canceled when vehicle speed is below 25 mph (40 km/h).
- The accelerator pedal is depressed firmly or the vehicle is on a hill etc.

When it is possible to inform the driver of automatic cancelation in advance, a prior notice screen will appear on the multi-information display.

Possible driving distance when driving in EV drive mode

In EV drive mode, it is possible to drive up about 1/2 mile (1 km) if driving at a speed of about 25 mph (40 km/h) or less.
(The distance that is possible depends on the hybrid battery [traction battery] level and driving conditions.)

Fuel economy

RX450h is designed to achieve the best possible fuel economy during normal driving (using the gasoline engine and electric motor [traction motor]). Driving in EV drive mode more than necessary may lower fuel economy.

CAUTION

Caution while driving

When driving in EV drive mode no engine noise is made. As such, pedestrians, people riding bicycles or other people and vehicles in the surrounding area may not be aware of the vehicle starting off or approaching them. Therefore, take extra care while driving even if the Vehicle Proximity Notification System is active.

Select a shift position appropriate for the driving conditions.

Shifting the shift lever

While the "ENGINE START STOP" switch is in IGNITION ON mode, depress the brake pedal and move the shift lever.

When shifting the shift lever between P and D, make sure that the vehicle is completely stopped.

Shift position purpose

Shift position	Function
P	Parking the vehicle/starting the engine
R	Reversing
N	Neutral
D	Normal driving*1
S	S mode driving*2 (→P. 223)

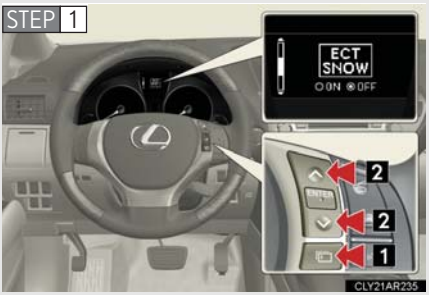
*1: Shifting to the D position allows the system to select a gear suitable for the driving conditions. Setting the shift lever to the D position is recommended for normal driving.

*2: Selecting shift ranges using S mode restricts the upper limit of the possible gear ranges, controls engine braking forces, and prevents unnecessary upshifting.

Selecting snow mode

Use snow mode for accelerating and driving on slippery road surfaces such as snow.

STEP 1

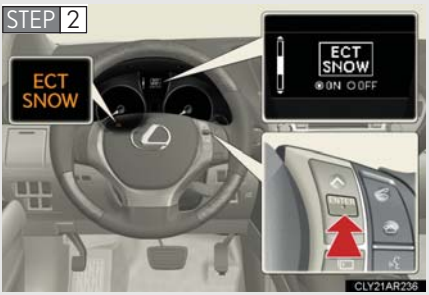


1 Press the menu switch.

The multi-information display will change modes to electronic features control mode.

2 Press the "∧" or "∨" switch until "ECT SNOW" appears.

STEP 2



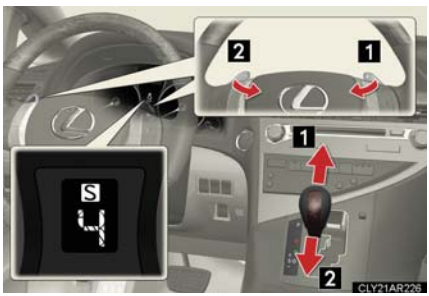
Press the "ENTER" switch to change to "ON".
The "ECT SNOW" indicator will be displayed.

Each pressing of the switch turns snow mode on and off.

Press the menu switch to change to the normal display.

Changing shift ranges in S mode

To enter S mode, shift the shift lever to the S position. The shift range can then be selected by operating the "-" and "+" paddle shift switches (if equipped) or the shift lever. Changing the shift range allows restriction of the upper limit of the gears to be used, preventing unnecessary upshifting and enabling the level of engine braking force to be selected.



1 Upshifting
2 Downshifting

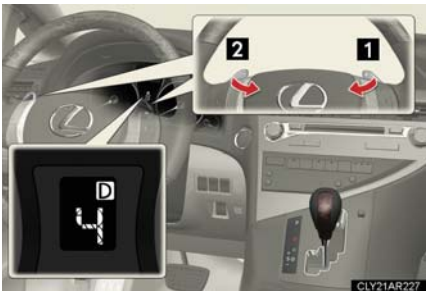
The initial shift range in S mode is set automatically to "5" or "4" according to vehicle speed. However, the initial shift range may be set to "3" if AI-SHIFT has operated while the shift lever was in the D position.
(→P. 225)

Shift ranges and their functions

- Automatically selecting gears between 1 and 6 according to vehicle speed and driving conditions. But the gear is limited according to selected shift range.
- You can choose from 6 levels of engine braking force.
- A lower shift range will provide greater engine braking force than a higher shift range, and the engine speed will also increase.

Selecting shift ranges in the D position (vehicles with paddle shift switches)

To drive using temporary shift range selection, operate the "-" paddle shift switch. The shift range can then be selected by operating the "-" and "+" paddle shift switches. Changing the shift range allows restriction of the upper limit of the gears to be used, preventing unnecessary upshifting and enabling the level of engine braking force to be selected.



1 Upshifting

2 Downshifting

To return to normal D position driving, the "+" paddle shift switch must be held down for a period of time.

Shift ranges and their functions
→P. 223

■ **When the "-" paddle shift switch is operated in the D position (vehicles with paddle shift switches)**

When the "-" paddle shift switch is operated in the D position, a shift range will be automatically selected. The highest gear of the first shift range will be one gear lower than the gear in use during normal D position driving.

■ **Automatic deactivation of shift range selection in the D position (vehicles with paddle shift switches)**

Shift range selection in the D position will be deactivated in the following situations:

- When the vehicle comes to a stop
- When range 6 is selected and the accelerator pedal is depressed
- If the accelerator pedal is depressed for more than a certain period of time

■ **Snow mode automatic deactivation**

Snow mode is automatically deactivated if the "ENGINE START STOP" switch is turned off after driving in snow mode.

■ **S mode**

- When the shift range is "5" or lower, holding the shift lever toward "+" sets the shift range to "6".
- To prevent the engine from over-revving, upshifting may automatically occur.
- To protect the automatic transmission, a function is adopted that automatically selects a higher shift range when the fluid temperature is high.

■ **AI-SHIFT**

AI-SHIFT automatically selects the suitable gear according to driver performance and driving conditions.
The AI-SHIFT automatically operates when the shift lever is in the D position. (Shifting the shift lever to the S position cancels the function.)
The engine speed may remain high after releasing the accelerator pedal. This does not indicate a malfunction.

■ **Driving on a downhill**

On declines, there may be case where the vehicle shifts down automatically to obtain engine braking. As a result of the downshifting, the engine speed may increase.

■ **When driving with cruise control or radar cruise control activated**

Even when performing the following actions with the intent of enabling engine braking, engine braking will not activate while driving in S mode and downshifting to 5 or 4 because cruise control or radar cruise control will not be canceled.
(→P. 291, 296)

■ **If the shift lever cannot be shifted from P**

→P. 916

■ **If S does not come on or D comes on even after shifting the shift lever to S**

This may indicate a malfunction in the automatic transmission system. Have the vehicle inspected by your Lexus dealer immediately.
(In this situation, the transmission will operate in the same as manner as when the shift lever is in D.)

■ **Downshift restriction warning buzzer (S mode)**

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the shift lever or paddle shift switch is operated. (The warning buzzer will sound twice.)

Automatic transmission (RX350 8-speed models)

Select a shift position appropriate for the driving conditions.

Shifting the shift lever

While the "ENGINE START STOP" switch is in IGNITION ON mode, depress the brake pedal and move the shift lever.

When shifting the shift lever between P and D, make sure that the vehicle is completely stopped.

Shift position purpose

Shift position	Function
P	Parking the vehicle/starting the engine
R	Reversing
N	Neutral
D	Normal driving*
M	M mode driving (→P. 232)

*: To improve fuel efficiency and reduce noises, set the shift lever in the D position for normal driving.

Shift position uses

Shift position	Display	Function	Purpose
		Normal D position driving	Gears between 1 and 8 are automatically selected according to driving conditions
	(paddle shift switches activated)	Shift range selection (→P. 230)	Allows optimum use of engine braking
		Individual gear selection (→P. 232)	Allows the driver to select gears for sporty driving

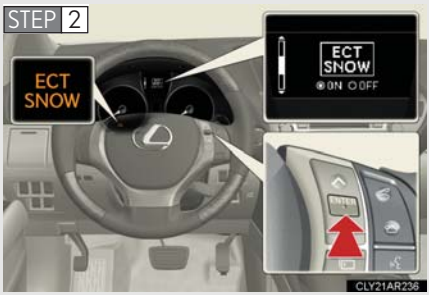
Selecting snow mode

Use snow mode for accelerating and driving on slippery road surfaces such as snow.

1 Press the menu switch.

The multi-information display will change modes to electronic features control mode.

2 Press the "∧" or "∨" switch until "ECT SNOW" appears.



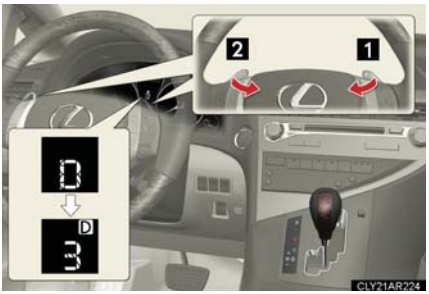
Press the "ENTER" switch to change to "ON".
The "ECT SNOW" indicator will be displayed.

Each pressing of the switch turns snow mode on and off.

Press the menu switch to change to the normal display.

Selecting shift ranges in the D position

To drive using temporary shift range selection, operate the "-" paddle shift switch. The shift range can then be selected by operating the "-" and "+" paddle shift switches. Changing the shift range allows restriction of the highest gear, preventing unnecessary upshifting and enabling the level of engine braking force to be selected.



1 Higher shift range

2 Lower shift range

The selected shift range, from 1 to 8, will be displayed in the meter cluster.

To return to normal D position driving, the "+" paddle shift switch must be held down for a period of time.

Shift ranges and their functions

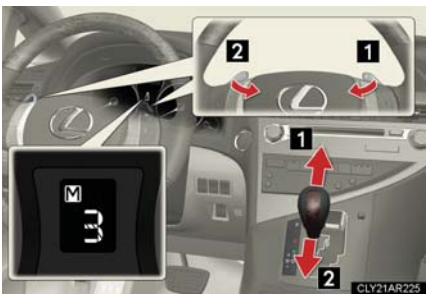
Meter cluster display*	Function
8	Gears between 1 and 8 are automatically selected according to vehicle speed and driving conditions
7	Gears between 1 and 7 are automatically selected according to vehicle speed and driving conditions
6	Gears between 1 and 6 are automatically selected according to vehicle speed and driving conditions
5	Gears between 1 and 5 are automatically selected according to vehicle speed and driving conditions
4	Gears between 1 and 4 are automatically selected according to vehicle speed and driving conditions
3	Gears between 1 and 3 are automatically selected according to vehicle speed and driving conditions
2	Gears between 1 and 2 are automatically selected according to vehicle speed and driving conditions
1	The gear is set at 1

*: "D" is also displayed to indicate the shift position.

A lower shift range will provide greater engine braking force than a higher shift range.

Selecting gears in the M position

To enter M mode, shift the shift lever to the M position. Gears can then be selected by operating the shift lever or paddle shift switches, allowing you to drive in the gear of your choosing.



1 Upshifting
2 Downshifting
The gear changes once every time the shift lever or paddle shift switch is operated.

When in the M position, the gear will not change unless the shift lever or paddle shift switches are operated.

However, even when in the M position, the gears will be automatically changed in the following situations:

- When vehicle speed drops (downshift only).
- When the automatic transmission fluid or engine coolant temperature is low.
- When engine speed is higher than necessary. (upshift only)

Gear functions

Meter cluster display*	Function
8	The gear is fixed at 8th gear
7	The gear is fixed at 7th gear
6	The gear is fixed at 6th gear
5	The gear is fixed at 5th gear
4	The gear is fixed at 4th gear
3	The gear is fixed at 3rd gear
2	The gear is fixed at 2nd gear
1	The gear is fixed at 1st gear

*: "M" is also displayed to indicate the shift position.

When the "-" paddle shift switch is operated in the D position

- When the "-" paddle shift switch is operated in the D position, a shift range will be automatically selected. The highest gear of the first shift range will be one gear lower than the gear in use during normal D position driving.
- If the "-" paddle shift switch is operated when a shift range is selected while in the D position, the shift range may be lowered by two ranges or more in accordance with the driving conditions.

Automatic deactivation of shift range selection in the D position

Shift range selection in the D position will be deactivated in the following situations:

- When the vehicle comes to a stop
- If the accelerator pedal is depressed for more than a certain period of time in one shift range

■ **Downshift restrictions warning buzzer**

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the shift lever or paddle shift switch is operated. (A buzzer will sound twice.)

■ **When driving with cruise control activated**

Even when performing the following actions with the intent of enabling engine braking, engine braking will not activate while driving in M mode and downshifting to 7, 6, 5 or 4 because cruise control will not be canceled. (→P. 291)

■ **Automatic deactivation of snow mode**

If the "ENGINE START STOP" switch is turned off after driving in snow mode, the mode is automatically deactivated.

■ **If the shift lever cannot be shifted from P**

→P. 916

■ **Automatic gear selection when the vehicle is stopped**

When the vehicle comes to a stop, the transmission will automatically downshift to allow you to start off in 1st gear.

■ **If the automatic transmission fluid temperature warning message is displayed**

If the automatic transmission fluid temperature warning message is displayed while driving, make sure you return to normal D position driving and reduce speed by easing off the accelerator pedal. Stop the vehicle in a safe place, shift the shift lever to the P position and let the engine idle until the warning message goes out.

When the warning message goes out, the vehicle can be driven again.

If the warning message does not go out after waiting a while, have your vehicle inspected by your Lexus dealer.

AI-SHIFT

The AI-SHIFT automatically selects the suitable gear according to driver performance and driving conditions.
The AI-SHIFT automatically operates when the shift lever is in the D position. However, operating the "-" paddle shift switch will restrict the function's operation. (Shifting the shift lever to the M position cancels the function.)
The engine speed may remain high after releasing the accelerator pedal. This does not indicate a malfunction.

CAUTION

When driving on slippery road surfaces

Be careful of downshifting and sudden acceleration, as this could result in the vehicle skidding to the side or spinning.

Select a shift position appropriate for the driving conditions.

Shifting the shift lever

While the "POWER" switch is in ON mode, depress the brake pedal and move the shift lever.

When shifting the shift lever between P and D, make sure that the vehicle is completely stopped.

Shift position purpose

Shift position	Function
P	Parking the vehicle/starting the hybrid system
R	Reversing
N	Neutral
D	Normal driving*1
S	S mode driving*2 (→P. 240)

*1: Shifting to the D position allows the system to select a gear suitable for the driving conditions. Setting the shift lever to the D position is recommended for normal driving.

*2: Selecting shift ranges using S mode controls engine braking forces.

Selecting Eco drive mode

When the vehicle is driven in Eco drive mode, vehicle driving force and operation of the air conditioning system (heating/cooling) is controlled to improve fuel efficiency.

STEP 1

1 Press the menu switch.

The multi-information display will change modes to electronic features control mode.

2 Press the "∧" or "∨" switch until "ECO MODE" appears.

STEP 2

Press the "ENTER" switch to change to "ON".
The "ECO MODE" indicator will be displayed.

Each pressing of the switch turns Eco drive mode on and off.

Press the menu switch to change to the normal display.

Selecting snow mode

Use snow mode for accelerating and driving on slippery road surfaces such as snow.

STEP 1

1 Press the menu switch.

The multi-information display will change modes to electronic features control mode.

2 Press the "∧" or "∨" switch until "HYBRID SNOW" appears.

STEP 2

Press the "ENTER" switch to change to "ON".
The "Hybrid SNOW" indicator will be displayed.

Each pressing of the switch turns snow mode on and off.

Press the menu switch to change to the normal display.

Selecting sport mode

Use when high levels of response and feeling are desirable, such as when driving in mountainous regions or when overtaking.

1 Press the menu switch.

The multi-information display will change modes to electronic features control mode.

2 Press the "∧" or "∨" switch until "SPORT MODE" appears.

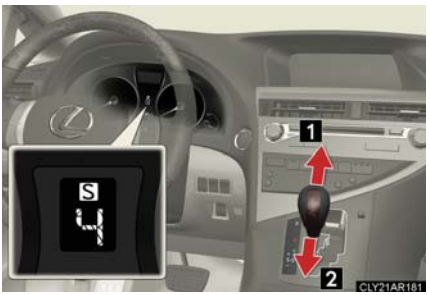
Press the "ENTER" switch to change to "ON".
The "SPORT MODE" indicator will be displayed.

Each pressing of the switch turns sport mode on and off.

Press the menu switch to change to the normal display.

Changing shift ranges in S mode

When the shift lever is in the S position, the shift lever can be operated as follows:



1 Upshifting
2 Downshifting

The initial shift range in S mode is set automatically to “5” or “4” according to vehicle speed.

Shift ranges and their functions

- You can choose from 6 levels of engine braking force.
- A lower shift range will provide greater engine braking force than a higher shift range, and the engine speed will also increase.

■ **Operation of the air conditioning system in Eco drive mode**

Eco drive mode controls the heating/cooling operations and fan speed of the air conditioning system to enhance fuel efficiency. (→P. 412, 421) To improve air conditioning performance, adjust the fan speed or turn off Eco drive mode.

■ **Automatic return to normal driving mode**

If snow mode or sport mode is selected, the driving mode will automatically return to normal mode when the hybrid system is turned off.

■ **S mode**

- When the shift range is "5" or lower, holding the shift lever toward "+" sets the shift range to "6".
- To prevent the engine from over-revving, upshifting may automatically occur.

■ **AI-SHIFT**

AI-SHIFT automatically selects the suitable gear according to driver performance and driving conditions.
AI-SHIFT automatically operates when the shift lever is in the D position. (Shifting the shift lever to the S position cancels the function.)
The engine speed may remain high after releasing the accelerator pedal. This does not indicate a malfunction.

■ **When driving with cruise control or radar cruise control activated**

Even when performing the following actions with the intent of enabling engine braking, engine braking will not activate because cruise control or radar cruise control will not be canceled.

- While driving in D or S mode, downshifting to 5 or 4. (→P. 291, 296)
- When switching the driving mode to sport mode while driving in D position. (→P. 239)

■ **If the shift lever cannot be shifted from P**

→P. 916

■ **If S does not come on even after shifting the shift lever to S**

This may indicate a malfunction in the hybrid transmission system. Have the vehicle inspected by your Lexus dealer immediately.
(In this situation, the hybrid transmission will operate in the same as manner as when the shift lever is in D.)

Downshift restriction warning buzzer (S mode)

To help ensure safety and driving performance, downshifting operation may sometimes be restricted. In some circumstances, downshifting may not be possible even when the shift lever is operated. (The buzzer will sound twice.)

CAUTION

When driving on slippery road surfaces

Do not accelerate or shift gears suddenly.
Sudden changes in engine braking may cause the vehicle to spin or skid, resulting in an accident.

NOTICE

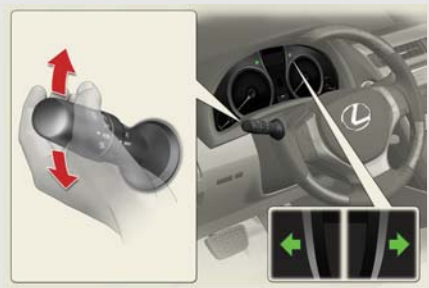
Hybrid battery (traction battery) charge precaution

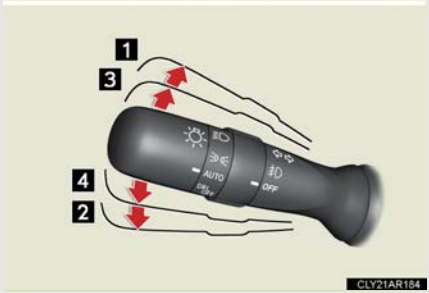
If the shift lever is in N, the hybrid battery (traction battery) will not be charged even when the engine is running. Therefore, if the vehicle is left with the shift lever in N for a long period of time, the hybrid battery (traction battery) will discharge, and this may result in the vehicle not being able to start.

Turn signal lever

The turn signal lever can be used to show the following intention of the driver:

▶ Type A





1 Right turn

2 Left turn

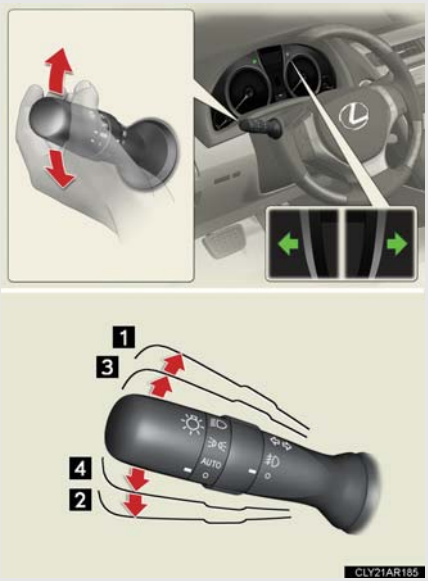
3 Lane change to the right (push and hold the lever partway)

The right hand signals will flash until you release the lever.

4 Lane change to the left (push and hold the lever partway)

The left hand signals will flash until you release the lever.

▶ Type B



1 Right turn

2 Left turn

3 Lane change to the right (push and hold the lever partway)

The right hand signals will flash until you release the lever.

4 Lane change to the left (push and hold the lever partway)

The left hand signals will flash until you release the lever.

■ **Turn signals can be operated when**

▶ RX350

The "ENGINE START STOP" switch is in IGNITION ON mode.

▶ RX450h

The "POWER" switch is in ON mode.

■ **If the indicators flash faster than usual**

Check that a light bulb in the front or rear turn signal lights has not burned out.

Parking brake

To set the parking brake, fully depress the parking brake pedal with your left foot while depressing the brake pedal with your right foot.
(Depressing the pedal again releases the parking brake.)

■ **Usage in winter time**

→P. 369

⚠ NOTICE

■ **Before driving**

Fully release the parking brake.
Driving the vehicle with the parking brake set will lead to brake components overheating, which may affect braking performance and increase brake wear.

Horn

To sound the horn, press on or close to the mark.